

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of ORF7A [1 - 121] SARS CoV2

Enzyme description:- ORF7A [1 - 121]

Clone number:- DU 68512

Source:- Recombinant

Expression system:- *E. coli*

Tag:- N-terminal MBP

Purification method:- Amylose resin

Calculated molecular mass:-

Monoisotopic 57,946.52 daltons

Average Mass 57,983.09 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 5.18

Purity:- 85 %

Enzyme storage buffer:-

50 mM Tris-HCl pH 7.5, 270 mM Sucrose, 150 mM NaCl, 0.1 mM EGTA,
0.1 % 2-mercaptoethanol, 0.03 % Brij-35

Storage temperature:- -70 °C

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Clone Data Sheet

ORF7A [1 – 121] SARS CoV2

Protein ORF7A [1 - 121]

Clone number DU 68508

Accession number QHD43421.1

Tags N-terminal MBP

Bacterially expressed protein

MKIEEGKLVWINGDKGYNGLAEVGGKFEKDTGIKVTVEHPDKLE
EKFPQVAATGDGPDIIFWAHDRFGGYAQSGLLAEITPDKAFQDKL
YPFTWDAVRYNGKLIAYPIAVEALSLIYNKDLLPNPPKTWEEIPA
LDKELKAKGKSALMFNLQEPYFTWPLIAADGGYAFKYENGYDIK
DVGVDNAGAKAGLTFLVDLIKNKHMNADTDYSIAEAAFNKGETAM
TINGPWAWSNIDTSKVNYGVTVLPTFKGQPSKPFVGVLSAGINAA
SPNKELAKEFLENYLLTDEGLEAVNKDKPLGAVALKSYYEELVKD
PRIAATMENAQKGEIMPNIPOMSAFWYAVRTAVINAASGRQTVDE
ALKDAQTNSSNNNNNNNNNNLGD~~DDDD~~KVPEFLEVLFQGPLGSMK
IILFLALITLATCELYHYQECVRGTTVLLKEPCSSGTYE~~GN~~SPFH
PLADNKFALTCFSTQFAFACPDGVKHVYQLRARSVSPKLFIRQEE
VQELYSPIFLIVAAIVFITLCFTLKRKTE

Native sequence Amino acids M1 – E121 (end).
Residue M404 of the fusion protein is equivalent to M1 of the native enzyme. The MBP tag is located at residues 1 – 367.

Protease cleavage Enterokinase (DDDDK) residues 384 – 388
PreScission (LEVLFQGP) residues 393 – 400